

Ozone

- Ten to fifteen miles above the earth, stratospheric ozone occurs naturally and protects us from exposure to the sun's ultraviolet radiation. At ground-level, ozone is a result of air pollution and can harm our health. Remember, ozone is good up high, but bad nearby!
- Ground-level ozone is formed when two chemicals, nitrogen oxides (NO_x) and volatile organic compounds (VOCs), react in the presence of heat and sunlight.
- NO_x and VOCs are emitted when fossil fuels are burned. Some sources of these pollutants are cars, trucks, and industry. Other sources of VOCs include natural sources like pine trees, as well as vapors from paints, glues, and solvents.
- Ground-level ozone is a concern during the hot, summer months.
- Areas that usually have the most severe ground-level ozone problems include densely populated areas and areas with high levels of traffic.
- The Environmental Protection Agency sets standards for ozone and other air pollutants. For each pollutant, there are two standards. The primary standard is set to protect health, regardless of the cost. The secondary standard protects public welfare. Public welfare includes effects on soil, water, property, animals, and visibility.
- When the ground-level ozone level is high, it can cause eye irritation, headaches, dryness of the mouth and throat, shortness of breath, wheezing, and coughing.
- Children, the elderly, and people with pre-existing lung disease such as emphysema, asthma, and chronic bronchitis are especially sensitive to ground-level ozone. However, everyone is sensitive to high levels of ground-level ozone.
- On high ozone days, you can help reduce ozone by combining trips, limiting unnecessary trips, carpooling, avoiding driving during peak hours, and using gas-powered lawn equipment and refueling your car after 6 p.m.

This fact sheet is intended as a summary of issues related to ground-level ozone, and is not all-inclusive. To obtain additional information regarding ozone and the ozone forecast, you may contact the Bureau of Air Quality at (803) 898-4123, access the Bureau web page at <http://www.scdhec.gov/environment/baq>, or write to the following address:

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